

SPELERPES LINEOLUS Cope, Proc. Acad. Nat. Sci. Philad. 1865, 196. *Ophiobatrachus vermicularis* Gray, Ann. Mag. N. Hist. 1868, 297.

This species varies somewhat in the relative length of the tail. One of the specimens from Cordova, Vera Cruz, measures as follows: head and body 17·3 lines; tail 2 in. 10·4 lines.

In the collections of the Smithsonian Institution.

GROTRITON CARBONARIUS Cope.

A uniformly black variety of this species occurs in the high lands of Guatemala, and another with two dorso-lateral ochre bands is found in Yucatan. Mus. Smithsonian.

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Dec. 1st.

The President, Dr. HAYS, in the Chair.

Thirty-five members present.

The following papers were presented for publication:

“Notice of some remains of extinct Insectivora from Dakota.”

By Dr. J. Leidy.

“Observations on Reptiles of the Old World. Art. II.” By Edw. D. Cope.

“Notes on some points in the structure and habits of the Palæozoic Crinoidea.” By F. B. Meek and A. H. Worthen.

DR. LEIDY exhibited some specimens of Mica recently received from Westport, Canada, remarkable for the beauty and distinctness of its asterism, produced by minute acicular crystals profusely scattered between the laminae. The star exhibited twelve equidistant rays, exceeding in strength any previously seen by him in varieties of the mineral.

PROF. COPE made some observations on some extinct reptiles of interest. One of these, represented by a single sacro-caudal vertebra from Swedesboro', N. J., indicated a second species of *Elasmosaurus*. It was of equal size with the corresponding one of the Kansas specimens, but differed in the square and uncontracted form of the centrum, and greater stoutness of the diapophyses. He called it *E. ORIENTALIS*.

Another reptile was represented by a vertebra, tooth, and portion of mandible. It was a gavial-like crocodile, which if of proportions similar to those of the Gangetic species, would indicate an animal of thirty feet in length. It belonged to the genus *THECACHAMPSA* Cope, and was allied to the *T. ANTIQUA* (*Crocodylus* Leidy), but differed in the more compressed knife-like tooth crowns. Miocene of Maryland.

He also exhibited bones and teeth of a large Rodent from the cave deposits of Anguilla, one of the Virgin West India Islands. The characters observed were those of the genus *Chinchilla*, but the roots of the teeth were contracted and not so open as in many Rodents, as though having a more limited period of growth, or perhaps like deciduous teeth, which are much reduced in number in most Rodents. The species was nearly as large as the *Castoroides ohioensis* of North America, but had relatively smaller incisor teeth. The body was probably as large as that of the Virginia deer, and the limb bones as stout, as seen in portions of femora and other pieces preserved. He called the animal *AMBLYRHIZA INUNDATA*, and thought that its discovery on so small an island, with others of like character, indicated that the Carribean continent had not been submerged prior to the close of the Post-pliocene, and that its connection was with other Antilles, while a wide strait separated it from the then comparatively remote shores of North America.

1868.]

MR. MEEHAN stated that it is a fact well-known to most of us, that the *Wisteria sinensis*, as we find it cultivated, rarely produces fruit. The large seed vessels I now present are from a plant I have which bears abundantly. Why it does so I think may prove of interest to the members.

A few years ago Darron discovered motion in tendrils. Subsequently, in a paper published in our Proceedings, I showed that this motion required nutrition for its force, which was so much abstracted from growth. I explained by this what had hitherto been a mystery, why grapes grew more freely and healthy when running over trees, than when exhausting their vigor in fruitless motion to find something to cling to. I referred to many plants on which I had experimented, amongst others *Wisteria sinensis*; a plant was trained a few feet high and then left to support itself. It took all its food to fight gravitation. Since then it has continued to grow as a bush or small round-headed tree, unless a branch happens to extend to the ground, or a neighboring bush, when such branch will push forth with its old time vigor. In proportion as this plant has lost the power of growth, it assumes a reproductive power. This year from my little *Wisteria tree* I have gathered a half-peck of seed pods.

That weakened vigor is favorable to reproduction is well known to the horticulturist. Hence the operations of root pruning, transplanting, summer pruning, and ringing the bark. The novelty of this *Wisteria* incident is that an excessive draft on the force necessary to overcome gravitation in the ascending plant is also an enfeebling cause.

The facts I have given have a three-fold interest. To the structural botanist, enabling him to get specimens of fruit for examination hitherto hard to be obtained; to the horticulturist, furnishing him with the means of freely propagating a plant hitherto rather difficult to increase, and to the natural philosopher, furnishing an additional illustration of what I have hitherto advanced, *that growth in a great measure is a struggle with gravitation, requiring great efforts by the nutritive powers of the plant to sustain it.*

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Dec. 8th.

The President, DR. HAYS, in the Chair.

Thirty-one members present.

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Dec. 15th.

The President, DR. HAYS, in the Chair.

Thirty-four members present.

The following paper was presented for publication:

"On the seed vessels of *Forsythia*." By Thos. Meehan.

Mr. Cope offered the following resolution which was adopted:

*Resolved*, That the Academy of Natural Sciences present their thanks to Theophilus H. Turner, M. D., U. S. A., for his very valuable gift of the skeleton of the great extinct reptile, the *Elasmosaurus platyurus*, from the neighborhood of Fort Wallace, Kansas.

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Dec. 22d.

The President, DR. HAYS, in the Chair.

Thirty-four members present.

[Dec.